Aug. 12, 1969 G. T. SOWINSKI 3,460,298

DRYWALL TOP-EDGE CASING

Filed Oct. 3, 1967 2 Sheets-Sheet 1

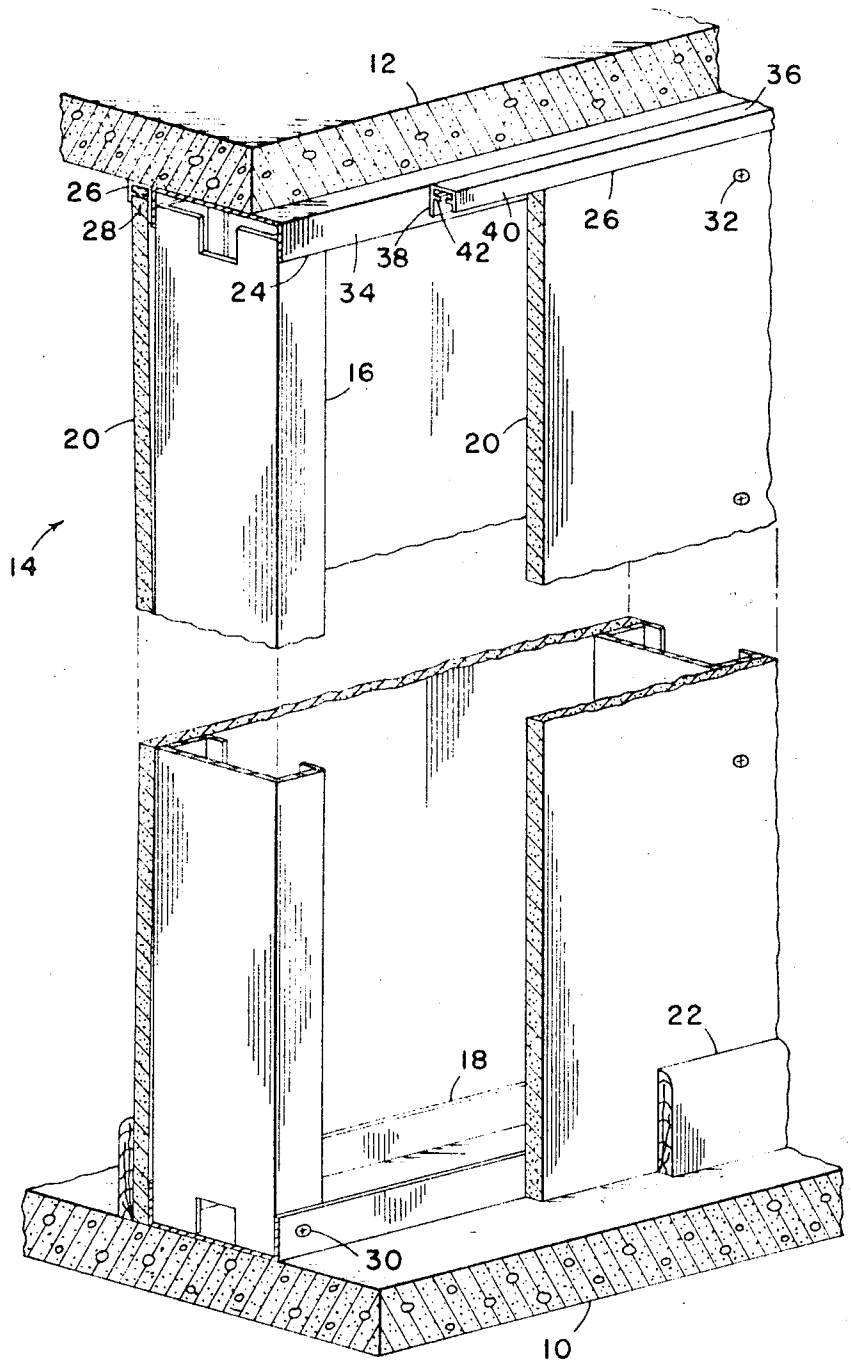


Fig. 1

INVENTOR.
Gerard T. Sowinski
BY
Robert F. Hause
ATTORNEY

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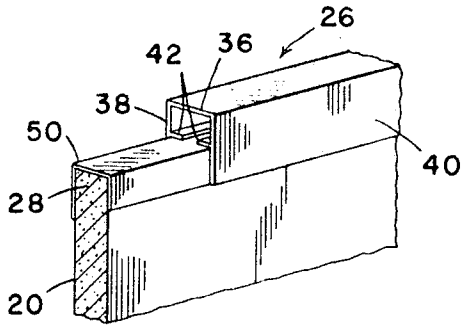


Fig. 2

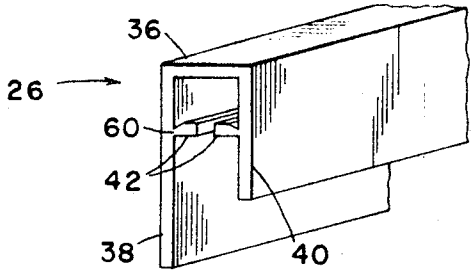


Fig. 3

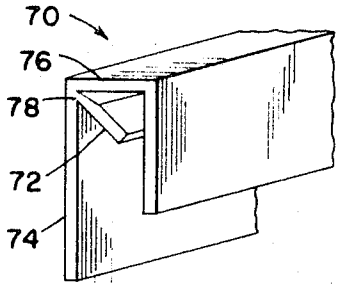


Fig. 4

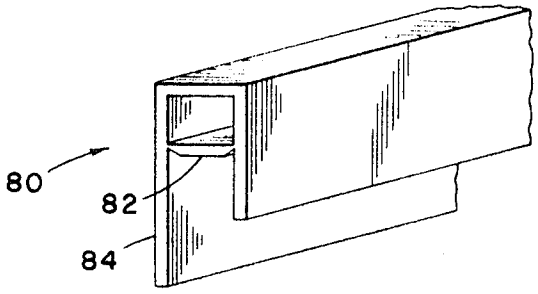


Fig. 5

INVENTOR.
Gerard T. Sowinski
BY
Robert T. Hance
ATTORNEY

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3,460,298

DRYWALL TOP-EDGE CASING

Gerard T. Sowinski, Lancaster, N.Y., assignor to National Gypsum Company, Buffalo, N.Y., a corporation of Delaware

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Int. Cl. E04c 2/46
U.S. Cl. 52—98 1 Claim

ABSTRACT OF THE DISCLOSURE

An elongate metal channel having an opening equal to the thickness of gypsum wallboard, enclosing the top edge of gypsum wallboard and abutting the ceiling, having an elongate flange within the channel which is affixed to the remainder of the channel by a relatively weak connection, whereby insertion of wall board into the channel by normal manual insertion forces is limited partway therein by the flange, but subsequent shifting or expansion forces will force the wall board further into the channel with failure of the weak connection.

BACKGROUND OF THE INVENTION

It is known that subsequent to completion of building structures there are many ways in which the building, or portions thereof, move, as, for example, expansion and contraction of materials, settling of the structure, earth movements, etc. As a result the relationship between the floor, the sidewalls and the ceiling may change tending to create forces in the sidewalls which result in cracks in the walls. This is true in many kinds of wall construction, including the most common of walls, the drywall construction embodying a surface of gypsum wallboards. Many systems have been suggested to provide means for preventing cracking of drywall which have all generally met with one objection or another. For example, typical expansion joints have an obvious unnatural appearing opening or groove and are aesthetically undesirable. Compressible strips, placed between the top of a wall and a ceiling, bulge out when compressed.

SUMMARY OF THE INVENTION

The present invention is directed to a novel channel member having some form of false bottom which is very weakly affixed to the remainder of the channel. This channel is manually placed on the top edge of wallboard. The false bottom prevents placing the board all the way into the channel. The channel is disposed against the ceiling and has the appearance of a finished trim element, with no obvious means showing for absorbing wall movement.

It is an object of the invention to provide an improved drywall metal casing and in particular a drywall casing having a weakly held false bottom therein.

It is a further object to provide an improved construction of drywall in combination with a ceiling and floor.

These and other objects and advantages of the invention will be more readily apparent when considered in relation to the preferred embodiments as set forth in the specification and shown in the drawings in which:

FIG. 1 is an isometric cross-sectional view of a wall, floor, and ceiling construction having a weak-false-bottom drywall casing at the wall top, which construction is in accordance with the present invention.

FIG. 2 is an isometric view of a modified form of construction of the wall top of FIG. 1.

FIG. 3 is an isometric view of the weak-false-bottom drywall casing of FIG. 1.

FIGS. 4 and 5 are isometric views of modified forms of weak-false-bottom drywall casings, embodying the present invention.

Referring to FIG. 1, there is shown a floor **10**, a ceiling **12** and a wall **14** therebetween. Wall **14** includes a supporting stud **16**, an elongate floor track **18**, gypsum wallboards **20** on each side which form the well-known drywall exposed surfaces, floor trim **22**, an elongate ceiling track **24** and an elongate weak-false-bottomed casing **26** disposed on the top edge **28** of each of the wall boards **20**.

The floor track **18** and the ceiling track **24** are respectively affixed to the floor **10** and ceiling **12** to form means for receiving the respective ends of studs **16**. The studs **16** shown are metal studs, presently commonly used for screw attachment of gypsum wallboard. The studs **16** are inserted all the way down into the channel of floor track **18**, and may be affixed thereto as by a short screw **30**.

The studs **16** extend only about halfway up into the channel of ceiling track **24** and are not firmly affixed thereto. It will be preferable during partition erection if the stud dimensions are such as to provide friction fit within the ceiling track, however, after the wallboards **20** are affixed to the studs **16**, as by self-tapping screws **32**, the studs will be held in position by the wallboards. The wall boards **20** are of substantially the same height as the studs **16** and the top edges **28** with the casing **26** thereon are disposed outside of the vertical sidewalls **34** of the ceiling track **24**. In affixing the wallboards **20** to studs **16**, it is important that none of the screws **32** be any closer to the bottom edge of ceiling track sidewall **34** than about one inch.

In accordance with the invention, the casings **26** are basically elongate rigid channels, formed of metal or plastic, having a top wall **36**, an inner sidewall **38**, and an outer side wall **40**. In the preferred embodiment shown, casing **26** includes two short flanges **42, 42** extending inwardly less than halfway, respectively from each of the two sidewalls **38, 40** and forming a false-bottom within the casing **26**. The two flanges **42, 42** are purposely formed relatively weak, and easy to be broken off from sidewalls **38, 40**.

In constructing wall **14**, wallboards **20** are cut to a height such that with the casing **26** placed on the wallboard top edge **28**, with wallboard abutting flanges **42, 42**, the wallboard with the casing **26** just fits between floor **10** and ceiling **12**. The casing **26** has an opening width which provides a friction fit on the wallboard top edge **28**. The wallboard **20**, with the casing **26** is affixed to the studs **16**, but none of them are affixed to the ceiling track **24**. Accordingly, when building movement causes the ceiling **12** to move toward the floor **10**, the ceiling track side wall **34** is free to move downward relative to the stud **16** and the wallboard **20**. Simultaneously the ceiling **12** forces the casing **26** downward relative to the wallboard **20**, the forces here involved being substantially greater than the manual force employed in originally placing the casing **26** on to the wallboard top edge **28**. In forcing the casing **26** further onto wallboard **20**, the weak flanges **42, 42** are broken off casing sidewalls **38, 40**, and the wallboard top edge is then free to move up into casing **26** until the wallboard abuts the casing top wall **36**.

After undergoing such movement, the exposed appearance of the partition will be unblemished, appearing as when new. A highly simplified wall construction is thus provided which permits of building movement, absorbing the effects of such movement with no effects of the movement showing on the surface.

FIGURE 2 shows an alternative form of constructing the top portion of the wall of the invention, wherein a thin sheet metal channel shaped casing bead **50** is disposed on the wallboard top edge **28**, prior to manually placing the novel casing **26** thereon, thus strengthening the wallboard

top edge **28** to lessen the potential of damage to the top edge **28** in the process of breaking off of the weak flanges **42, 42** during building movement.

FIGURE 3 shows the preferred form of casing **26** enlarged, to clarify the means for making the flanges **42, 42** easy to break off properly. Each flange **42** is formed of a thickness generally throughout the flange which is greater than the thickness at the juncture **60** whereat the flange **42** joins the sidewalls **38** or **40**. The break-off of the flange **42**, when it occurs, thus occurs at the most advantageous point, permitting the further movement of the wallboard top edge **28** into casing **26** with the least possibility of any damage or resistance to desired relative movement.

In FIGURE 4, a modified form of casing **70** is shown, wherein a weakly held flange **72** extends diagonally from the corner between a sidewall **74** and the top wall **76**. Flange **72** is formed with a weakest, thinnest portion at the juncture **78** of the flange **72** with the sidewall and top wall corner. Flange **72** resists manual insertion of a wallboard top edge when about half-way inserted into the casing **70**, but is not sufficiently strong to resist the forces of a building movement tending to force the casing **70** further onto the wallboard, whereby the flange **72** bends upward, with such greater force, until the flange is parallel to and abutting the top wall **76**.

In FIGURE 5, a further modified form of casing **80** includes, as a separate element, a false bottom **82** weakly held between the casing sidewalls **84**, and spaced from the casing top wall **86**. Manual insertion of wallboard into casing **80** is limited by the false bottom **82**, which however moves upward relative to the casing sidewalls **84** with the greater forces of a building movement.

Having completed a detailed disclosure of the preferred embodiments of my invention, so that others may practice the same, I contemplate that variations may be made.

I claim:

1. A building partition comprising wallboard, an expansion absorption casing, said casing comprising an elongate substantially rigid, open-bottomed channel having two sidewalls and a top wall, and a relatively weakly-held false-bottom for stopping manual insertion of wallboard therein, spaced downwardly from said top wall, said casing being mounted on the top edge of said wallboard with said wallboard top edge abutting said relatively weakly-held false-bottom, said casing being disposed against a ceiling, whereby on movement of said building said ceiling can move relatively toward said wallboard by said wallboard moving said false-bottom upwardly within said casing, said wallboard being affixed to partition supporting studs of a height substantially equal to the height of said wallboard, said studs and said wallboard being substantially equally spaced from said ceiling whereby said ceiling can move relative to said studs and wallboard, said studs extending approximately halfway into a downwardly opening ceiling track, said wallboard top edge and said casing being disposed outwardly of said ceiling track, said ceiling track being vertically movable relative to said studs and said wallboard.

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FRANK L. ABBOTT, Primary Examiner

P. C. FAW, JR., Assistant Examiner

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